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Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/821,303 | Applicant(s) GHOTGE ET AL. | |
| | Examiner Jared M. Bibbee | Art Unit 2169 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 5 is objected to because of the following informalities: Claim 5 is objected under 37 C.F.R. 1.75 for depending on itself. For purposes of examining, claim 5 is presumed to depend on claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-32 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With respect to claims 1, 23, 29, and 32 it is clear that the claim language simply represents an abstract idea where the reporting on the integrity of the volume based on the examining of the shadow copy of the volume, but fails to provide a useful, concrete, and tangible purpose or result. Applicant is reminded that patent protection is limited to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept (*Brenner v. Manson*, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96 (1966)); *In re Fisher*, 421 F.3d 1365, 76 USPQ2d 1225 (Fed. Cir. 2005); *In re Ziegler*, 992 F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)).

Since the claims presented by the applicant are indeed simply abstract ideas, the claims are not covered by the statutory categories of patentable subject matter set forth in 35 U.S.C. 101. An abstract idea is categorized as one of the three judicially created exceptions to patentable subject matter (the three exceptions are Laws of Nature, Natural Phenomena, and

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Abstract Ideas). The courts have concluded that in order to patent on of the three judicial exceptions to the statutory categories of the invention the claimed subject matter must have a practical, real-world application that produces a useful, concrete, and tangible result (*State Street*, 149 F.3d at 1373-74, 47 USPQ2d at 1601-02).

In order to overcome this rejection, the applicant must add a final limitation to independent claims 1, 23, 29, and 32 showing step of actually presenting the reported integrity to a user in the form of a view. This final step is could be presented using the monitor mentioned in Fig. 1, 191 of the drawings included with the applicant's specification. By adding this conclusionary step, the applicant will add to the claimed invention a useful, concrete, and tangible result that arises from a practical application of the method steps previously mentioned in the claim.

Claims 2-22, 24-28, and 30-31 are rejected because they contain the deficiencies of claims 1, 23, and 29 respectively.

Additionally with respect to claims 1 and 32, the claims are rejected under 35 U.S.C. 101 because it also appears that the computer readable medium that is claimed by the applicant is not limited to physical articles or objects, which are structurally and functionally interrelated to the instructions in such a manner that would enable the instructions to act as a computer component and realize any functionality. On page 7, lines 12-14, the applicant states that the computer-readable medium consists of a computer storage media and a communication media. On page 8, lines 3-15, the applicant further states that the 'communication media' embodies a modulated data signal such as a carrier wave, which includes "communication mediums, such as, wireless

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communications, RF, Infrared, and acoustic". This type of communication media or transmission media is not limited to media, which meet the criteria set forth above.

Appropriate clarification and/or correction is required. It is noted that in this instance, Applicant's specification clearly distinguishes between media, which "store" versus communications media, which would "convey" the instructions. Therefore, an amendment to the claims to recite a 'physical computer readable storage medium' rather than 'computer readable medium' would be favorably considered.

Claims 2-22 are rejected because they contain the deficiencies of claims 1 respectively.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "examining the shadow copy to verify an integrity of the volume" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Examiner suspects that applicant meant to have claim 5 depend from claim 1 instead of claim 5.

Examiner suggests changing the claim so that it depends from claim 1 instead of claim 5.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 4-10, 15, 16, 18, 19, 21, 23-26, 29-30, and 32 are rejected under 35

U.S.C. 102(b) as being anticipated by Slaughter et al (U.S. 6,014,669).

With respect to independent claims 1 and 32, Slaughter clearly teaches a computer-readable medium (702, Fig. 7) having computer-executable instructions (102, Fig. 7) (*see column 13, lines 24-32 and Fig. 7*), comprising: creating a shadow copy of a volume (*see column 6, lines 40-44*); examining the shadow copy to verify an integrity of the volume (*see column 5, lines 24-34 and column 7, lines 19-26; Note that in column 2, lines 31-36, Slaughter discloses that a shadow copy of the configuration database is maintained at each node. Also note that for each node a shadow copy of the configuration database is maintained. Each configuration database shadow copy is examined to insure consistency/integrity of the data. Consistency/Integrity is examined locally and globally.*); reporting on the integrity of the volume based on the examining of the shadow copy of the volume (*see column 6, lines 40-60; Note that the consistency/integrity is verified once an update is executed. If the update is successful then the database commits the changes else it sends an error message and reverts to a previous shadow copy of the data.*).

With respect to dependent claim 4, Slaughter clearly teaches the limitation where the volume includes meta-data that comprises entries, wherein at least some of the entries comprise file and directory entries (*see column 10, lines 44-60*).

With respect to dependent claim 5, Slaughter clearly teaches the limitation where examining the shadow copy to verify an integrity of the volume comprises searching the meta-data for file entries which no directory entry indexes (*see column 10, lines 44-60; Note specifically lines 52-56 define the columns within a file and directory entry. Then in lines 58-59, Slaughter discloses that a blank is*

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used to represent 'No Value'. These 'No Value' entries can be searched using a query such as the one being discussed in column 11, lines 57-65).

With respect to dependent claim 6, Slaughter clearly teaches the limitation where examining the shadow copy to verify an integrity of the volume comprises searching the meta-data for directory entries which index a file entry wherein the file entry does not index the directory entry (*see column 10, lines 44-60; Note specifically lines 52-56 define the columns within a file and directory entry. Then in lines 58-59, Slaughter discloses that a blank is used to represent 'No Value'. According to the example in lines 59-60, a 'No Value' in a file column would cause a corruption in the data because the directory would be pointing to a non-accessible file.*).

With respect to dependent claim 7, Slaughter clearly teaches the limitation where examining the shadow copy to verify an integrity of the volume comprises searching the meta-data for a directory entry which is indexed by a file entry, wherein the directory entry does not index the file entry (*see column 10, lines 44-60; Note specifically lines 52-56 define the columns within a file and directory entry. Then in lines 58-59, Slaughter discloses that a blank is used to represent 'No Value'. According to the example in lines 59-60, a 'No Value' in a directory column would cause a corruption in the data because the file would be pointing to a non-accessible directory.*).

With respect to dependent claim 8, Slaughter clearly teaches the limitation where at least some of the entries comprise attributes of an object associated with the entry, wherein examining the shadow copy to verify an integrity of the volume comprises examining the at least some of the entries to verify that attributes included in each entry are correct (*see column 10, lines 64-67 through column 11, lines 1-12; Note that within the consistency record there exists attribute columns such as, date (first column), length (third column), and conditions (fourth column), etc.*).

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With respect to dependent claim 9, Slaughter clearly teaches the limitation where one of the attributes comprises a length of a name of an object associated with the entry including the attribute (*see column 11, lines 5-7*).

With respect to dependent claim 10, Slaughter clearly teaches the limitation where examining the shadow copy to verify an integrity of the volume comprises searching for unreadable entries in the meta-data (*see column 10, lines 44-60; Note specifically lines 52-56 define the columns within a file and directory entry. Then in lines 58-59, Slaughter discloses that a blank is used to represent 'No Value'. A 'No Value' cannot be read because there is nothing to be read. These 'No Value' entries can be searched using a query such as the one being discussed in column 11, lines 57-65*).

With respect to dependent claim 15, Slaughter clearly teaches the limitation where the volume comprises a raw volume (*see column 6, lines 40-44; Note that Applicant points out that a database has a raw volume associated with its own data verification tool. Slaughter creates a shadow copy of the configuration database, which would be a copy of the raw volume of data. Also see column 3, lines 63-67 through column 4, lines 1-2, where Slaughter distinguishes between a raw volume (configuration database 110) and a volume (Dynamic database 114)*).

With respect to dependent claim 16, Slaughter clearly teaches the limitation where the raw volume lacks a table that identifies objects contained on the volume (*see Fig. 6 and column 10, lines 44-60; Note that Slaughter does teach a table like structure ("rows and columns", see lines 44-49), but fails to identify any objects that might be stored within the volume. The table like structure only provides file/directory information*).

With respect to dependent claim 18, Slaughter clearly teaches the limitation where the volume is accessed by a database engine (*see column 4, lines 9-10; Note that the cluster server serves as the database engine which accesses the local cluster configuration database.*).

With respect to dependent claim 19, Slaughter clearly teaches the limitation where examining the shadow copy to verify an integrity of the volume comprises the database engine examining the shadow copy (*see column 4, lines 14-35; Note the cluster membership monitor upholds consistency between the shadow copies located at each node.*).

With respect to dependent claim 21, Slaughter clearly teaches the limitation where the shadow copy comprises a logical duplicate of the volume at a selected point in time, wherein the shadow copy maintains data found on the volume at the selected point in time as the volume changes (*see column 6, lines 40-44 and column 5, lines 24-34 and column 11, lines 2-4 and lines 13-16; Note that the consistency record within each shadow copy is used to ensure that the cluster has the most up to date copy of the changes made to the master database.*).

With respect to independent claim 23, claim 23 is a method claim corresponding to the computer-readable medium claim 1 and is rejected for the same reasons set forth in the rejection of claim 1 above.

With respect to dependent claim 24, Slaughter clearly teaches the limitation where the shadow copy is created by one of a plurality of shadow copy providers that each exist on a system, each shadow copy provider capable of providing a shadow copy of the volume upon command (*see column 6, lines 40-60; Note that each node creates a shadow copy and therefore serves as a provider to the master server. If an update fails, a command is sent to each node instructing each node to roll-back to an updated shadow copy.*).

With respect to dependent claim 25, Slaughter clearly teaches the limitation where each shadow copy provider is designed to create a shadow copy for a particular type of application (108, Fig. 1) (see column 3, lines 51-55; Note that the Client software communicates with cluster server to request database operations such as queries and updates.).

With respect to dependent claim 26, Slaughter clearly teaches the limitation where the type of application comprises a volume verification application (see column 4, lines 14-35; Note that Client communicates to the cluster server which utilizes a Cluster Membership Monitor (CMM) to maintain/verify the consistency between shadow copies on the nodes.).

With respect to independent claim 29, claim 29 is a system claim corresponding to the computer-readable medium claim 1 and is rejected for the same reasons set forth in the rejection of claim 1 above.

With respect to dependent claim 30, Slaughter clearly teaches the limitation where the shadow copy comprises a logical duplicate of the volume at a selected point in time (see column 6, lines 40-44 and column 5, lines 24-34 and column 11, lines 2-4 and lines 13-16; Note that the consistency record within each shadow copy is used to ensure that the cluster has the most up to date copy of the changes made to the master database.).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 2, 3, 12, 13, 17, 20, 22, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slaughter in view of Wu et al (U.S. 6,981,114 B1).

With respect to dependent claim 2, note the discussion of claim 1 above, Slaughter discloses all of the elements of claim 1 but fails to explicitly recite the limitation of the volume remains on-line while examining the shadow copy to verify an integrity of the volume. However, Wu clearly teaches the volume remains on-line while examining the shadow copy to verify an integrity of the volume (*see column 6, lines 57-62*). It would have been obvious at the time of the inventions to substitute the cluster configuration database shadow copy as taught by Slaughter with the snapshot as taught by Wu. The skilled artisan would have been motivated to substitute the cluster configuration database shadow copy as taught by Slaughter with the snapshot as taught by Wu for the purpose of increasing access availability and reducing the data recovery time (*see column 1, lines 55-61*).

With respect to dependent claim 3, the combination of Slaughter and Wu disclose all of the limitations of claim 2 and Wu further teaches the volume is changed while examining the shadow copy to verify an integrity of the volume and wherein verifying the integrity is unaffected by any changes to the volume (*see column 6, lines 57-62*). It would have been obvious at the time of the inventions to substitute the cluster configuration database shadow copy as taught by Slaughter with the snapshot as taught by Wu. The skilled artisan would have been motivated to substitute the cluster configuration database shadow copy as taught by Slaughter with the snapshot as taught by Wu for the purpose of increasing access availability and reducing the data recovery time (*see column 1, lines 55-61*).

With respect to dependent claim 12, note the discussion of claim 4 above, Slaughter discloses all of the elements of claim 4 but fails to explicitly recite the limitation of the meta-data indicates a hierarchy of the objects contained on the volume. However, Wu clearly teaches the meta-data indicates a hierarchy of the objects contained on the volume (*see column 3, lines 58-67*). It would have been obvious at the time of the inventions to modify the meta-data as taught by Slaughter to include the file system as taught by Wu. The skilled artisan would have been motivated to modify the meta-data as taught by Slaughter to include the file system as taught by Wu for the purpose of increasing access availability and reducing the data recovery time (*see column 1, lines 55-61*).

With respect to dependent claim 13, note the discussion of claim 4 above, Slaughter discloses all of the elements of claim 4 but fails to explicitly recite the limitation of the meta-data indicates where objects are stored on the volume. However, Wu teaches the meta-data indicates where objects are stored on the volume (*see column 6, lines 20-23*). It would have been obvious at the time of the inventions to modify the meta-data as taught by Slaughter to include the modification log as taught by Wu. The skilled artisan would have been motivated to modify the meta-data as taught by Slaughter to include the modification log as taught by Wu for the purpose of increasing access availability and reducing the data recovery time (*see column 1, lines 55-61*).

With respect to dependent claim 17, note the discussion of claim 15 above, Slaughter discloses all of the elements of claim 15 but fails to explicitly recite the limitation of the raw volume includes a disk including partition information. However, Wu teaches the raw volume includes a disk including partition information (*see column 4, lines 43-50*). It would have been obvious at the time of the inventions to modify the raw volume as taught by Slaughter to

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incorporate partitions as taught by Wu. The skilled artisan would have been motivated to modify the raw volume as taught by Slaughter to incorporate partitions as taught by Wu for the purpose of increasing access availability and reducing the data recovery time (*see column 1, lines 55-61*).

With respect to dependent claim 20, note the discussion of claim 1 above, Slaughter discloses all of the elements of claim 1 but fails to explicitly recite the limitation of making the volume available for access while examining the shadow copy to verify the integrity of the volume. However, Wu teaches making the volume available for access while examining the shadow copy to verify the integrity of the volume (*see column 6, lines 57-62*). It would have been obvious at the time of the inventions to substitute the cluster configuration database shadow copy as taught by Slaughter with the snapshot as taught by Wu. The skilled artisan would have been motivated to substitute the cluster configuration database shadow copy as taught by Slaughter with the snapshot as taught by Wu for the purpose of increasing access availability and reducing the data recovery time (*see column 1, lines 55-61*).

With respect to dependent claim 22, note the discussion of claim 1 above, Slaughter discloses all of the elements of claim 1 but fails to explicitly recite the limitation where the shadow copy is created via at least one of a copy-on-write and split mirror. However, Wu clearly teaches the shadow copy is created via at least one of a copy-on-write and split mirror (*see column 4, lines 61-65*). It would have been obvious at the time of the inventions to modify the creation of a shadow copy as taught by Slaughter to incorporate a copy-on-write snapshot creation method as taught by Wu. The skilled artisan would have been motivated to modify the creation of a shadow copy as taught by Slaughter to incorporate a copy-on-write snapshot

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creation method as taught by Wu for the purpose of increasing access availability and reducing the data recovery time (*see column 1, lines 55-61*).

With respect to dependent claim 31, note the discussion of claim 29 above, Slaughter discloses all of the elements of claim 29 but fails to explicitly recite the limitation where the shadow copy is maintained by actions comprising copying each block that changes on the volume to another location before the block changes, wherein a request to read data from the shadow copy for a block that has changed in the volume is satisfied with data from the other location. However, Wu clearly teaches the shadow copy is maintained by actions comprising copying each block that changes on the volume to another location before the block changes, wherein a request to read data from the shadow copy for a block that has changed in the volume is satisfied with data from the other location (*see column 10, lines 56-67 through column 11, lines 1-27*). It would have been obvious at the time of the inventions to modify the maintenance of the shadow copy as taught by Slaughter to incorporate the block maintenance as taught by Wu. The skilled artisan would have been motivated to modify the maintenance of the shadow copy as taught by Slaughter to incorporate the block maintenance as taught by Wu for the purpose of increasing access availability and reducing the data recovery time (*see column 1, lines 55-61*).

9. Claims 11, 14, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slaughter in view of Orcutt (U.S. 6,377,958 B1).

With respect to dependent claim 11, Slaughter clearly teaches the limitation where the volume includes meta-data that comprises entries and wherein examining the shadow copy to verify an integrity of the volume comprises searching the entries, but fails to explicitly disclose searching the entries for unreferenced security descriptors. However, Orcutt clearly teaches

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security descriptors (*see column 3, line 67 through column 4, line 1*). It would have been obvious at the time of the inventions to modify the searching of entries within a shadow copy as taught by Slaughter to incorporate security descriptors as a search field as taught by Orcutt. The skilled artisan would have been motivated to modify the searching of entries within a shadow copy as taught by Slaughter to incorporate security descriptors as a search field as taught by Orcutt for the purpose of limiting the risk of unintentional loss of user data (*see column 6, lines 36-43*).

With respect to dependent claim 14, note the discussion of claim 4 above, Slaughter discloses all of the elements of claim 4 but fails to explicitly recite the limitation where the meta-data includes a security descriptor that indicates access rights associated with at least one object on the volume. However, Orcutt clearly teaches security descriptors (*see column 3, line 67 through column 4, line 1*). It would have been obvious at the time of the inventions to modify the meta-data within a shadow copy as taught by Slaughter to incorporate security descriptors as a meta-data field as taught by Orcutt. The skilled artisan would have been motivated to modify the meta-data within a shadow copy as taught by Slaughter to incorporate security descriptors as a meta-data field as taught by Orcutt for the purpose of limiting the risk of unintentional loss of user data (*see column 6, lines 36-43*).

With respect to dependent claim 27, note the discussion of claim 23 above, Slaughter discloses all of the elements of claim 23 but fails to explicitly recite the limitation of the volume comprises a volume formatted in accordance with FAT, NTFS, or UDFS. However, Orcutt clearly teaches a volume formatted in accordance with FAT, NTFS, or UDFS (*see column 8, lines 40-49*). It would have been obvious at the time of the inventions to substitute the volume as taught in Slaughter with the NTFS formatted volume as taught by Orcutt. The skilled artisan

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would have been motivated to substitute the volume as taught in Slaughter with the NTFS formatted volume as taught by Orcutt for the purpose of limiting the risk of unintentional loss of user data (*see column 6, lines 36-43*).

With respect to dependent claim 28, note the discussion of claim 23 above, Slaughter discloses all of the elements of claim 23 but fails to explicitly recite the limitation of the volume comprises a volume formatted for UNIX®, LINUX®, OS/2®, or BeOS®. However, Orcutt clearly teaches a volume formatted for UNIX®, LINUX®, OS/2®, or BeOS® (*see column 6, line 41*). It would have been obvious at the time of the inventions to substitute the volume as taught in Slaughter with the LINUX® formatted volume as taught by Orcutt. The skilled artisan would have been motivated to substitute the volume as taught in Slaughter with the LINUX® formatted volume as taught by Orcutt for the purpose of limiting the risk of unintentional loss of user data (*see column 6, lines 36-43*).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Tate et al (U.S. 5,991,774) is cited to teach a method for identifying the validity of an executable file description by appending the checksum and the version ID of the file to and end thereof.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared M. Bibbee whose telephone number is 571-270-1054. The examiner can normally be reached on 5/4/9.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on 571-272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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